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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,914	02/22/2002	Randy Harris	291958173US	7791

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EXAMINER

VALENTINE, DONALD R

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/080,914

Applicant(s)

HARRIS ET AL.

Examiner

Donald R. Valentine

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-94 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-34, 38-50 and 67-94 is/are allowed.
- 6) ☒ Claim(s) 1-2, -5, 8, 14-16, 18-19, 35-36, 51-57, 60-66 is/are rejected.
- 7) ☒ Claim(s) 3, 6, 7, 9-13, 17, 20, 37, 58 and 59 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1-2, 4-5, 8, 14-16, 18-19, 35-36, 57 and 60-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leedy in view of Schmidt.

Leedy shows apparatus comprising a plurality of modules for processing wafers and a "handler" for moving wafers. The handler is referred to as a robotic system, which moves wafers between modules and is considered by the examiner to be a "transfer device". The wafers may be manually loaded instead of using the

handler. (See col. 3, lines 47-55 and col. 4, lines 34-40). The handler appears to be arranged to have restricted access by the user to it as the disclosure recites an open and closed system (col. 4, lines 14-17) and shows chamber wall 24 which could be considered to be a “shield”. (See Figure 1).

Leedy does not specifically state that there is an input/output station. However, the position of the wafer cassette 22 would suggest that such a station is inherently present in the apparatus pictured by Figure 1. The reference discloses a cassette, which is being considered by the examiner as the functional equivalent of applicants’ “container carrying a plurality” of workpieces. The reference does not recite “microelectronic workpieces” but does recite wafers, which are being considered as “microelectronic” workpieces. Leedy’s apparatus inherently includes access apertures because the modules are situated to enable entry and removal from the module chambers.

Schmidt shows microelectronic workpieces, which are characterized as semiconductor wafers (col. 1, lines 25-29). Schmidt also discloses a plurality of modules, which utilizes a workpiece transport unit (col. 2, lines 29-65). The apparatus of Schmidt includes a plurality of workpiece processing stations with inlet and outlet stations (col. 4, lines 49-65).

The skilled artisan would find it obvious to configure an inlet/outlet station in combination with a series of processing stations for processing workpieces in Leedy in the manner of Schmidt because both references process wafers, “microelectronic workpieces”, in modules and Schmidt provides processing stations as being equivalent to process modules.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 51- 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 51 lacks antecedent basis for “substrate”.

Allowable Subject Matter

6. Claims 21-34, 38-50 and 67-94 are allowed.
7. Claims 3, 6-7, 9-13, 17, 20, 37 and 58-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 52-56 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claim 51 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Corlay et al show treating microelectronics with a plurality of processing stations. Doche shows transferring flat objects via robots manually or automatically.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald R. Valentine whose telephone number is 703-308-3327. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read "Donald R. Valentine". The signature is fluid and cursive, with the first name "Donald" and last name "Valentine" clearly distinguishable.

Donald R. Valentine
Primary Examiner
Art Unit 1742

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September 5, 2003